

### REMARKS

Favorable reconsideration of this application, in light of the following discussion, is respectfully requested.

Claims 1-31 are currently pending. No claims have been amended herewith.

In the outstanding Office Action, Claims 1-27 were rejected under 35 U.S.C. § 112, first paragraph, as “based on a disclosure which is non-enabling”;<sup>1</sup> and Claims 1-27 were rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements.

Applicants wish to thank the Examiner for the interview granted Applicants’ representative on February 3, 2005, at which time the outstanding rejection of the claims was discussed. At the conclusion of the interview, the Examiner indicated that the outstanding rejections of the claims under 35 U.S.C. § 112 would be withdrawn in response to a formal response to the outstanding Office Action.

Claim 1 is directed to a method for coding a signal frame at a transmitter using a Karhunen-Loeve transform (KLT), comprising the steps of: (1) estimating KLT basis vectors of the signal frame; (2) calculating KLT coefficients of the signal frame; and (3) transmitting at least one of the KLT coefficients, but not the KLT basis vectors, to a receiver.

Applicants respectfully traverse the rejection of Claim 1 (and dependent Claims 2-14) under 35 U.S.C. § 112, first paragraph. As shown, for example, in Figures 2A-2C, and as explained in the interview discussed above, the steps recited in Claim 1 are fully supported and enabled by the original specification. In particular, Applicants note that Figure 2C and the discussion related thereto in the specification clearly sets forth enabling support for the limitation of transmitting at least one of the KLT coefficients, but not the KLT basis vectors, to a receiver. In a non-limiting example, Figure 2C illustrates that the basis vectors are

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<sup>1</sup> See page 2 of the Office Action dated January 3, 2005.

estimated at both a transmitter and a receiver, thereby obviating the need to transmit the KLT basis vectors. Accordingly, Applicants respectfully traverse the rejection of Claim 1 (and dependent Claims 2-14) as being non-enabling under 35 U.S.C. § 112, first paragraph.

Applicants respectfully traverse the rejection of Claim 1 (and dependent Claims 2-14) under 35 U.S.C. § 112, second paragraph, for being incomplete for omitting essential elements. As discussed in the interview, contrary to the assertion on page 3 of the Office Action, Claim 1 does not necessarily require “an improved way of KLT coefficients encoding method.” Rather, as discussed in the non-limiting example above with regard to Figure 2C, the basis vectors are estimated at both the transmitter and the receiver. Accordingly, the KLT basis vectors do not need to be transmitted to the receiver, and there is no omission in Claim 1 regarding the calculation of the KLT coefficients. Accordingly, Applicants respectfully traverse the rejection of Claim 1 (and dependent Claims 2-14) as being incomplete for omitting essential elements.

Independent Claims 15, 16, and 29-31 recite limitations analogous to the limitations recited in Claim 1. Accordingly, for the reasons stated above for the patentability of Claim 1, Applicants respectfully traverse the rejections of Claims 15-31 under 35 U.S.C. § 112.

Thus, it is respectfully submitted that independent Claims 1, 15, 16, and 29-31 (and all associated dependent claims) satisfy the requirements of 35 U.S.C. § 112.

Consequently, in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The present application is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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